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## ABSTRACT OF THE DISCLOSURE

An antenna element is placed in a first mold for molding a first resin member including a plurality of protrusions, formed on an outer peripheral face of the first resin member and arranged with a fixed interval relative to a circumferential direction of the first resin member, and a tip end portion, having a cross sectional shape in which projected portions are arranged with a fixed interval relative to the circumferential direction of the first resin member. Insulating resin is injected into the first mold to form the first resin member. The first resin member is placed in a second mold such that the protrusions are brought into contact with an inner face of the second mold. Insulating resin is injected into the second mold from a gate confronting the tip end portion of the first resin member, to form a second resin member coated on the first resin member.